

REMARKS

The indication of allowable subject matter in claims 7, 8, 12, 14-19 and 21 is acknowledged and appreciated. Accordingly, claims 7 and 12 have been rewritten into independent form. In view of the following remarks, it is respectfully submitted that all claims are in condition for allowance.

Claim 22 is provisionally objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claim 3. Though traversed, claim 22 has been canceled in order to reduce issues so as to expedite prosecution.

Claim 20 stands rejected under 35 U.S.C. § 112, second paragraph. In order to expedite prosecution, claim 20 has been amended to obviate the alleged indefiniteness. Accordingly, it is respectfully requested that the rejection of claim 20 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claims 1-3 stand rejected under 35 U.S.C. § 102 as being anticipated by Takashima ('286), claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Takashima in view of applicant's admission of prior art ("APA"), claims 9-11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Takashima in view of APA, and claims 1-6 and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kaneoka et al. (JP '395). Claims 1 and 13 are the sole independent claims rejected over prior art. These rejections are respectfully traversed for the following reasons.

Claims 1 and 13 each embody a paste removing element that is arranged on the plate such that a squeegee contacts the paste moving element before contacting the mask when commencing a printing step. Both Takashima and Kaneoka et al. are silent as to the arrangement of the alleged paste removing element relative to the path of a squeegee in the manner recited in claims 1 and 13. Indeed, as shown in Figure 1C of Takashima and in direct contrast to the present invention, the squeegee 10 contacts the mask 11 before contacting the alleged protrusion 11c (similarly shown in the unrelayed patent to Kato et al. '984). Kaneoka et al. on the other hand is completely silent as to the positioning of the squeegee. In fact, as shown in Figure 1(c), Kaneoka et al. appears to be arranged in the conventional manner whereby the squeegee would first contact the mask 2 through the opening 8 and thereafter slide over openings 5. Kaneoka et al. is silent as to initial contact between a squeegee and the alleged protrusions, and or any functionality therebetween.

It should be noted that Kaneoka et al. does not indicate that the drawings are drawn to scale so that the relative positioning of the elements in the Figures are not illustrative of the actual arrangement (see MPEP § 2125 under the heading entitled "Proportions of Features in a Drawing Are Not Evidence of Actual Proportions When Drawings Are Not to Scale"). Moreover, as is well known, "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999).

The Examiner has indicated that the function of "paste removing" was not given patentable weight. However, as amended, claim 1 defines a suitable structure to carry out the claimed function. That is, the feature added to claim 1 is a structural feature by

defining the location(s) of the paste removing element on the plate so as to enable removal of paste from the squeegee before reaching the mask. Furthermore, it is noted that the path of a squeegee relative to a plate during a printing step is well-known. Accordingly, notwithstanding that a squeegee is not positively claimed, it is respectfully submitted that one of ordinary skill in the art would readily recognize the required location(s) of the paste removing element on the plate so as to satisfy the limitation recited in claims 1 and 13.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently, in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), and because none of the cited prior art discloses or suggests the claimed combination, it is submitted that the cited prior art does not anticipate claims 1 and 13, nor any claim dependent thereon. The Examiner is further directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claims 1 and 13 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Even further, with respect to Kaneoka et al., the Examiner alleges that "frames for supporting masks on all four sides are notoriously conventional in the art." However, even assuming *arguendo* true, it is respectfully submitted that the Examiner's allegation simply amounts to asserting that the claimed limitations are *individually* known. There is

no *objective* evidence on the record that indicates that Kaneoka et al. needs or desires, or would benefit from, adding another frame to further support the mask.

Indeed, it appears that the alleged protrusions of Kaneoka et al. themselves form part of a dual-layer mask 1,2 (Figure 1(c)) so as to surround the mask pattern on all four sides, thereby forming an amply self-supported mask plate. Any additional frame would therefore be unnecessarily cumulative. In this regard, it is noted that the Examiner has broadly interpreted the outer portions of the *self-supporting* mask 1,2 of Kaneoka et al. as the claimed paste removing element so as to leave no rationale for adding another frame and/or paste removing element. Accordingly, it is respectfully submitted that the Examiner's proposed modification is inconsistent with reading the outer portions of mask 1,2 as the claimed paste removing element, and is nonetheless based solely on improper hindsight reasoning using only Applicants' specification as a guide to reconstruct the claimed invention.

It is respectfully submitted that the proposed modification is improper because the Examiner has not provided the requisite *objective* evidence *from the prior art* that "suggests the desirability" of the proposed combination. As is well known in patent law, a *prima facie* showing of obviousness can only be established if the prior art "suggests the desirability" of the proposed combination using *objective* evidence. The Examiner is directed to MPEP § 2143.01 under the subsection entitled "Fact that References Can Be Combined or Modified is Not Sufficient to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (*In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990)).

In the instant case, even assuming *arguendo* that Kaneoka et al. can be modified to include an additional frame, it is submitted that the "mere fact that [Kaneoka et al.] can be modified ... does not render the resultant modification obvious" because nowhere does the prior art "suggest the desirability of the modification" as set forth by the Examiner.

The Examiner is further directed to MPEP § 2143.01 under the subsection entitled "Fact that the Claimed Invention is Within the Capabilities of One of Ordinary Skill in the Art is Not Sufficient by Itself to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

A statement that modifications of the prior art to meet the claimed invention would have been [obvious] because the references relied upon teach that all aspects of the claimed invention were *individually* known in the art is *not* sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. (citing *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)).

In the instant case, even assuming *arguendo* that Kaneoka et al. and the allegation that frames are well-known "teach that all aspects of the claimed invention [are] individually known in the art", it is submitted that such a conclusion "is not sufficient to establish a *prima facie* case of obviousness" because there is no *objective* reason on the record to combine the teachings of the cited prior art. At best, the Examiner has attempted to show only that the elements of the claimed invention are *individually* known without providing a *prima facie* showing of obviousness that the *combination* of elements recited in the claims is known or suggested in the art. For all the foregoing reasons, it is submitted that the proposed modification of Kaneoka et al. is improper.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the

independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination. Based on all the foregoing, it is submitted that claims 1-21 are patentable over the cited prior art.

NEW CLAIM

New claim 23 is submitted to be allowable over the cited prior art. None of the cited prior art discloses or suggests, *inter alia*, "a paste removing protrusion disposed on a printing start side and fixed on the non-opening area of said mask." For example, as described above, the alleged protrusions of Kaneoka et al. form part of the mask and are therefore arranged at various places, whereas the present invention needs protrusions only at a printing start side. More generally, the cited prior art is completely silent as to the needed positioning of the alleged paste removing protrusions for adequate paste removal because the alleged protrusions are not designed to remove paste from the squeegees. Only Applicants considered the problems associated with paste adherence to squeegees and conceived of means by which to overcome such problems as set forth throughout Applicants' specification.

CONCLUSION

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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